

The Examiner rejected claims 1-3 and 5-27 under 35 U.S.C. § 103 as obvious from the teachings of *Gaalaas et al.* in view of *Hiroi*. Claims 1 and 6 are independent method claims and claims 15, 17 and 21 are independent apparatus claims that particularly define over the teachings of these combined references. The primary reference expressly teaches sample rate conversion of only a non-audio portion of AES data channels, particularly the C (channel) and U (user) words forming a part of digital packet communication frames. The channels are merely parts of a packet that has different formats than other portions of the signal packet. There is no teaching or suggestion that the processing of these channels effects acceptance or rejection of the packet as recited in the claims.

Independent method claim 1 expressly recites detecting if disruption occurs while a packet is being received while, and accepting the packet of AC3 information under certain conditions. The Examiner argued that the detecting activity is disclosed by *Gaalaas et al.* as detecting a gap in the message data at Col. 12, lines 31-52 of the patent. That portion of *Gaalaas*' teachings merely refer to the handling of U channel data in which information units, consisting of a one bit preamble followed by seven information bits, are separated with a series of zeros defined as filler. The disclosure recites that the other sequences longer than that are filled to ignore the gap between messages. There is no detection of disruption in the reception of a packet. Moreover, claim 1 of the present application recites that acceptance of a packet of AC3 information is dependent upon enabling the output after a predetermined time period plus a count from which the last packet started, and no corresponding disclosure is recited in the sampling rate conversion teachings of *Gaalaas*.

The Examiner admits *Gaalaas* does not explicitly teach the use of satellite system with uplinks, but argues that it would have been obvious to incorporate the teachings of *Gaalaas* into the satellite transmission of *Hiroi* because it would provide a more efficient sample rate conversion system. However, the claim limitations do not define a sample rate conversion system in a broadcast system. Rather, the present invention provides transition through disruptions in signal transmission by enabling output upon receipt of the packet, and avoiding outputting data in the packet if it is received before a predetermined internal detecting

of a disruption occurs while the packet is being received and determining whether the last packet comes within a 10 millisecond time period after an AC3 packet was predicted to have arrived. Such conditions for accepting a packet or disabling acceptance of the packet is not taught or suggested by employing a sample rate conversion system for parts of the data, and combining that in a satellite broadcast system. Accordingly, the combined teachings fail to provide a proper ground for rejection of the claim under 35 U.S.C. § 103. Likewise, dependent claims 2, 3 and 5 are allowable.

Method claim 6 defines a method for syncing audio and video signals by establishing an agreement between channel status bit buried in an AC3 packet and a channel status bit buried within MPEG 2 PES header structure. In contrast, *Gaalaas et al.* teaches the sampling of a single channel status bit at two different rates. Accordingly, no establishing agreement or regenerating a channel status bit is taught or suggested by *Gaalaas et al.* and these deficiencies are not made by combining the teachings with those of the broadcast system of *Hiroi*. Accordingly, the combined references fail to provide a proper ground for rejection under 35 U.S.C. § 103. Moreover, the details of the system as defined in claim 7 and 8 are patentable as the existence of a channel bit in *Gaalaas et al.* does not teach or suggest how to change the channel bit, and identification of a CRC code does not teach or suggest recalculation of a code as particularly defined in the claims. Likewise, dependent claims 9-14 are also considered allowable.

Independent claim 15 defines an uplink processor that senses audio signal formats, and data output in the form of digital transport packets is subject to the claimed conditional access data. For example, as shown in Figure 4, switch logic such as compression detection shown in Figure 5 may control whether English language audio or second language audio may be encoded. Moreover, optional data input by the user in the form of the claimed program guide data are multiplexed with the output data and the conditionally accessed data. Such features are not taught or suggested by the sample rate conversion technique of *Gaalaas et al.*, and no such arguments were made by the Examiner. In addition, the teachings of *Hiroi* fail to define the sensing and redirecting of signals to process sensed audio signal formats as

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particularly defined in the claim. Accordingly, independent claim 15 and dependent claim 16 particularly and patentably define the present invention over the combined teachings under 35 U.S.C. § 103.

Independent apparatus claim 17 defines a checking, cataloging apparatus including a monitor, a computer interface for converting AES signal to computer readable language and a time code labeler for labeling each packet with a time stamp. Such an arrangement, as shown in the preferred embodiment in Figure 6, no such arrangement is taught or suggested by the teachings of *Gaalaas*. In fact, the Examiner's arguments fail to raise any legitimate issue that *Gaalaas* or *Hiroi* teach such a system or components. Accordingly, the state processor defined in dependent claims 18 and the timing fault detection as recited in claims 19 or 20 are likewise not made obvious by the combined references.

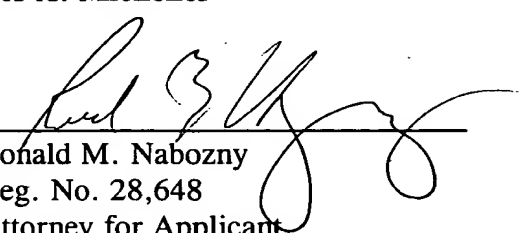
Independent apparatus claim 21, wherein a sound card receiving a house reference AES clock and locking audio output to the frequency of video production, is not taught or suggested by the Examiner's reference to Figure 2 of *Gaalaas*. The automatic syncing of playback of the video and audio signals of claim 22, and the manual starting of claim 23, are likewise not defined in the *Gaalaas* or *Hiroi* references. Likewise, the dependent claims recite features such as AC3 data storage on a CDROM in a manner which is not taught or suggested by the application of *Gaalaas*' sampling rate conversion in *Hiroi*'s broadcast system as argued by the Examiner. Accordingly, the claims particularly and patentably define the present invention over the teachings of the references relied upon by the Examiner.

In view of the foregoing, Applicant respectfully submits that the application is now in condition for allowance, and such action is respectfully requested.

Respectfully submitted,

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